

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (Currently Amended) A method of optically encoding data for transmission over a wavelength division multiplexed optical communications system comprising the steps of:

generating a periodic series of optical pulses defining a series of time slots, wherein one pulse appears in each time slot;

filtering the pulses to produce carrier pulses extending over more than one time slot; and

modulating the pulses with data for transmission; wherein

the filter gives rise to the pulses having a temporal profile with a minimum substantially in the center of each of the time slots adjacent to the time slot for that pulse and,

the filter is detuned to optimise transmission performance.

Claim 2. (Cancelled).

Claim 3. (Previously Presented) A method according to claim 1, wherein the filtered carrier pulses have a substantially flat top spectral profile.

Claim 4. (Cancelled).

Claim 5. (Currently Amended) A method according to ~~any preceding~~ claim 1, wherein the step of modulating the pulses with data is performed before the filtering step.

Claim 6. (Currently Amended) A transmitter for producing an optical data signal for transmission over a wavelength division multiplexer optical communication system comprising:

means for producing a periodic series of optical pulses defining a series of time slots, wherein one pulse appears in each time slot;

a filter having a spectral profile giving rise to pulses with a temporal profile extending over more than one time slot, the temporal profile having a minimum substantially in the center of each of the time slots adjacent to the time slot for that pulse; and

modulating means for modulating the pulses with data for transmission, wherein the filter is detuned to optimize transmission performance.

Claim 7. (Currently Amended) A transmitter according to ~~either~~ claim 5 ~~or~~ 6, wherein the filter has a substantially flat top spectral profile.

Claims 8 and 9. (Cancelled).